UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,401	02/01/2007	Axel Eble	100717-649-WCG	1324

27386 7590 05/11/2009

NORRIS, MCLAUGHLIN & MARCUS, P.A.
875 THIRD AVE
18TH FLOOR
NEW YORK, NY 10022

EXAMINER	
JANCA, ANDREW JOSEPH	

ART UNIT	PAPER NUMBER
1797	

MAIL DATE	DELIVERY MODE
05/11/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/579,401	EBLE ET AL.	
	Examiner	Art Unit	
	Andrew Janca	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 February 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 2/24/2009 have been fully considered but they are not persuasive.

2. Claim 2 was rejected in the prior action under 35 USC 112, second paragraph, for indefiniteness due to the recitation of a "Becker mixer" as a structural claim limitation, which includes a trademark or trade name. See applicants' Remarks 2/24/2009, page 3. The applicants are thanked for their submission of a copy of the European patent EP 0836880 which refers to a "Becker blade" (submitted machine translation, page 2, underlined) as a type of mixing apparatus presumably known to the reader of ordinary skill in the mixing arts. However, whether or not a current or former foreign trademark or trade name is considered generic enough by its use in the European market to be acceptable as a generic description of structure in a European patent application under European law is not relevant to whether it may be used as a generic description of structure in an application for patent in the United States.

a. Several trademarks including the term "Becker" have been issued in the United States: it is unclear to which registered trademark claim 2 refers.

b. At least one US corporation (Becker and Associates, of Lombard, Illinois) manufactures industrial mixing machines under the trade name "Becker". It is unclear whether the claim limitation refers to a specific model produced by this

corporation, and if so, which one; to a model produced by another US corporation; or to a model produced by a foreign corporation.

c. Even if it were unambiguous which model by which corporation were intended to be recited by the claim, it would not be clear whether the structural features of this model as manufactured on a particular date, or on sale in the United States on a particular date, or on sale in a particular foreign jurisdiction on a particular date would be what is defined and given legal protection by the claim; and whether that date would be the date of US filing, the date of US patent issue, or some other date within the lifetime of the patent. It is common for manufacturers to change and refine the structural features of a model sold under a particular trade name as time passes, and to manufacture and sell many different articles with structurally distinct features under the same name over the twenty or more years passing from the time a patent was first filed to the time when it expires.

3. The relevant issue in the rejection of claim 2 under 35 USC 112, second paragraph, is whether the recitation of a "Becker mixer" positively and unambiguously identifies structure which may be given legally binding patent protection. Since it is unclear what structure is defined by this claim limitation, it is impossible to determine the scope of the claim, and it is for this reason that the claim is indefinite.

4. With regard to the rejections of claims 1, 4, 5, 7, and 8 under 35 USC 102 as anticipated by US 1,735,393 to Hiller (Remarks pp 4-5), Hiller teaches a method of thawing a frozen, water-containing product, raw crude animal fat tissue containing lipids,

proteins, and water. Hiller's introductory discussion of the process (1:92ff) outlines the technical problem which his apparatus and method is presented to solve. Regarding applicants' arguments page 4, final paragraph, that Hiller refers to the prior art in his discussion of the problem does not remove the fact that his own apparatus and method do the same thing, rendering crude animal fat (2:49), albeit in an improved manner.

5. Regarding the argument page 5, first paragraph, to transfer a product from the solid to the liquid state is thawing a product which has been in a frozen state. A substance which is solid at one temperature and liquid at another, higher temperature is properly frozen at the temperature below its melting point. The applicants do not claim thawing a frozen product which is frozen only below a particular melting point, but only thawing a frozen product.

6. Regarding the argument page 5, second paragraph, applicants do not include in their claims any language regarding the special handling of the protein content of the frozen product. Claim 5 recites only that the product contain protein, and that it be of biological origin, which the pre-rendered animal fat of Hiller does and is. The raw product contains structured meat tissue (Hiller 1:99-100); further, all animal cells, including "pure" fat cells, contain proteins.

7. Regarding the arguments page 5, third and fourth paragraphs, applicants do not claim thawing an ice-containing product, but a frozen product containing some water. Hiller thus anticipates their claimed invention. Whether or not the unclaimed use of Hiller's invention as described in applicants' disclosure to melt products containing ice would be obvious to one of ordinary skill in the art is irrelevant, because the rejection

concerns anticipation, not obviousness. Hiller teaches a method of thawing a frozen-water, containing product, which proceeds by the steps outlined in claims 1, 4, 5, 7, and 8.

8. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., thawing at "mild temperature conditions", Remarks page 5 lines 6-7) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

9. For the argument page 5, final paragraph, see above. Pre-rendered animal fat contains both muscle proteins in the muscle cells present before rendering, and cellular proteins in the fat cells themselves.

10. With regard to the rejections of claims 1-3, 5, 7, and 8 under 35 USC 102 as anticipated by US 4,846,054 to Mange et al, applicants' arguments are unpersuasive for similar reasons. Regarding the argument page 6, third through fifth full paragraphs, 35 USC 102 concerns anticipation, not obviousness. Mange et al teach a method of thawing frozen, water-containing products including the steps claimed by applicants' method. Whether the particular use of that method to thaw ice-containing products as discussed in applicants' disclosure would be obvious to one of ordinary skill in the art is irrelevant to whether their actual claims have been taught before. Applicants point out that the pre-rendered fat is melted by Mange et al at temperatures up to 115ºC, and that this would "ruin any temperature sensible product handled". However, applicants do not

claim a method of thawing a water-containing and protein-containing product having a freezing point comparable to that of pure water, or a water-containing and protein-containing product having a freezing point below, say, the denaturing point of delicate proteins to be harvested for medical use: applicants claim a method of thawing a water-containing, protein-containing product. The temperatures used by Mange et al are perfectly appropriate for harvesting the fat for which their method is intended. Applicants' method as claimed is fully anticipated by the method taught by Mange et al.

11. With regard to the rejections of claims 1 and 4-9 under 35 USC 102 as anticipated by US 2,924,952 to Swenson et al, Remarks pp 7-8, applicants argue that the intent of the method taught by Swenson et al is very different from the intent of the method they have disclosed. Applicants are correct that the entire series of steps taught by Swenson et al, taken as a whole, does not represent an identical method to theirs. However, there is nothing in applicants' claims to limit their method steps to a self-contained procedure to be applied to a product in the absence of any other manipulations, and not to a smaller part of a larger process. Applicants' invention as claimed could just as well describe a step in the clarification of butter, for instance, the step of melting it to order to skim off impurities: that the final product is a solid substance, packaged in a cardboard box resting on the middle shelf of a supermarket display case, and not the intermediate liquid in the melting vat on the factory floor would not make the claimed process any less anticipated.

12. Regarding the arguments page 7, final paragraph, the applicants' claims do not recite introducing a frozen product into a horizontal mixing chamber of a horizontal

mixer and thawing the frozen product therein. The claims recite introducing a frozen product into a horizontal mixer, and heating the mixer and mixing its contents, whereby the frozen product is melted to form a liquid phase. The horizontal mixer of Swenson et al (figure 1) is comprised of several parts, including a horizontal mixing chamber 13 and its incorporated feeding pipe 40/140 (figures 2 and 5). The frozen product is introduced into the horizontal mixer, and the mixer is heated and its contents are mixed, whereby the frozen product is melted to form a liquid phase. The mixing takes place in chamber 13 and pipe 40/140, and the heating takes place in pipe 40/140 and (by heat conduction) its immediate vicinity. By these processes the frozen product is melted to form a liquid phase (Swenson et al 5:40-50). Swenson et al fully anticipates applicants' invention as claimed.

Claim Rejections - 35 USC § 112

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of the trademark or trade name "Becker mixer" as a limitation to identify or describe a particular product renders the claim scope uncertain, since the trademark or trade name cannot be used properly to identify any particular material or product. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982), and MPEP 2173.05(u).

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 1, 4, 5, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by US 1,735,393 to Hiller.

17. With regard to claim 1, Hiller teaches a method of thawing a frozen, water-containing (2:100) product, animal fat in a solid state below its melting point (1:97-100), which comprises introducing the frozen product into a horizontal mixer 11, heating the mixer (10:38-40) and at the same time mixing the contents of the mixer intensively (10:46-55), whereby the frozen product is melted to form a liquid phase (1:97-100), and during such melting, any floating frozen product being is continually submerged in the liquefied phase and mixed with it (10:46-72; for the persistence of the liquefied phase throughout the process see 10:93-100, 10:130-11:2).

18. With regard to claim 4, Hiller teaches that the horizontal mixer has wiping elements 21 which travel around the wall thereof (7:77-95).

19. With regard to claims 5 and 8, Hiller teaches that the frozen product is a protein-containing product from natural biological sources or from a biological process, raw animal fat containing meat tissue and fat cells (1:97-100).

20. With regard to claim 7, Hiller teaches that the horizontal mixer is operated continuously (2:71-72).

21. Claims 1-3, 5, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,846,054 to Mange et al.

22. With regard to claim 1, Mange et al teach a method of thawing a frozen, water-containing (2:13) product, animal fat in a solid state below its melting point (1:64-65), which comprises introducing the frozen product into a horizontal mixer 1, heating the mixer (5:19-31) and at the same time mixing the contents of the mixer intensively (5:39-44), whereby the frozen product is melted to form a liquid phase (5:41-42), and during such melting, any floating frozen product being is continually submerged in the liquefied phase and mixed with it (5:15-19, 5:39-44).

23. With regard to claim 2, Mange et al teach that the horizontal mixer includes a disc mixer (5:68-6:10).

24. With regard to claim 3, Mange et al teach that the horizontal mixer has mixing elements which have internal heating (5:20-21, 5:28-29).

25. With regard to claims 5 and 8, Mange et al teach that the frozen product is a protein-containing product from natural biological sources or from a biological process (1:14-34; 2:26).

26. With regard to claim 7, Mange et al teach that the horizontal mixer is operated continuously (1:64-65).

27. Claims 1 and 4-9 are rejected under 35 U.S.C. 102(b) as being anticipated by US 2,924,952 to Swenson et al.

28. With regard to claim 1, Swenson et al teach a method of thawing a frozen, water-containing product, ice cream (4:67), which comprises introducing the frozen product into a horizontal mixer (figure 1), heating the mixer at the frozen product's entry point (5:20-25) and at the same time mixing the contents of the mixer intensively (1:25-31), whereby the frozen product is melted to form a liquid phase (4:65-66, 5:40-57), and during such melting, any floating frozen product being is continually submerged in the liquefied phase and mixed with it (5:40-57).

29. With regard to claim 4, Swenson et al teach that the horizontal mixer has wiping elements 29 which travel around the wall thereof (2:34-39).

30. With regard to claims 5 and 8, Swenson et al teach that the frozen product is a protein-containing product from natural biological sources or from a biological process, milkshakes or soft-serve ice cream (4:65-66).

31. With regard to claims 6 and 9, Swenson et al teach that the temperature of the mixture is maintained at less than 5 degrees C above the melting point of the frozen product, the mixing taking place within freezing cylinder 13 such that the mixture remains below its ordinary melting point during the process (1:15-25, 4:69-70, 5:49). The heating element 152 at the cylinder's entry port assists liquefaction (5:40-50), but the primary mechanism bringing the frozen mixture to a fluid consistency (4:65-66) is the agitation of dasher 24 (1:25-28).

32. With regard to claim 7, Swenson et al teach that the horizontal mixer is operated continuously (1:40).

Conclusion

33. **This action is made final.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Janca whose telephone number is (571) 270-5550. The examiner can normally be reached on M-Th 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on (571) 272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJJ

/DAVID L. SORKIN/
Primary Examiner, Art Unit 1797